PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Has the NHS 111 urgent care telephone service been a success?	
	Case study and secondary data analysis in England	
AUTHORS	Pope, Catherine; Turnbull, Joanne; Jones, Jeremy; Prichard, Jane;	
	Rowsell, Alison; Halford, Susan	

VERSION 1 - REVIEW

REVIEWER	Janette Turner ScHARR, University of Sheffield, UK
REVIEW RETURNED	22-Nov-2016

GENERAL COMMENTS	This paper is well written and a useful overview of how the NHS 111 service has developed. I'm sure the authors have a wealth of qualitative data and in some ways it would be nice to see more of this but I accept that in combining the routine data analysis with qualitative findings this will be limited by word counts. I have a few minor points/corrections
	In the introduction it is stated that NHS 111 has provided telephone triage since 2014. It is true that it was at this point NHS Direct was "turned off" and 111 became the single telephone service but NHS 111 services had been in existence for some time before that (the authors own work was conducted in 2011-13 evidencing services before 2014). This is minor but a non specialist or international reader might interprete this as it only became available in 2014 and the rest of the paper presenting data from 2011 could than be confusing. it just needs some clarification at the beginning of the introduction around what the 2014 date signifies.
	In table 1 although described in footnotes it would be helpful to the reader if the section headings said whether numbers or proportion are being presented (took me a while to work it out0 so, for example to add (%) to the end of the heading in the table "Transfers to clinical advisors and use of callback"
	On page 8 line 37 onwards there is a quote about dispatching cars for home visits. Again, for a non expert or international reader this might be confusing as the description of NHS 111 in the introduction is focussed on the telephone triage element and someone could be forgiven for thinking this is all that happens and the care dispatching then doesn't make sense. I acknowledge that with so many providers there are many different operating models but it would be helpful in the description of 111 to put in a couple of examples of what they do in addition to triage (maybe using the home visit service as one so that it then provides context for the later description).

On page 12 in the section on cost effectiveness the reference used (8) is wrong - there is no economic data presented in this paper. The correct reference is the full report J Turner, A O'Cathain, E Knowles, J Nicholl, J Tosh, F Sampson, P Coleman, J Coster. Evaluation of NHS 111 Pilot sites. Final Report to the Department of Health. Medical Care Research Unit, University of Sheffield, 2012. http://www.shef.ac.uk/polopoly_fs/1.227404!/file/NHS_111_final_rep ort_August_2012.pdf
Page 13 in implications line 50 states "It had over a million and a half users in 2016" - implying this many users in one year but the data presented in table 1 shows over 1 million calls per month. This needs clarifying

REVIEWER	Anne Martin
	Canterbury Christ Church University
	United Kingdom
REVIEW RETURNED	16-Jan-2017

GENERAL COMMENTS

It would be useful to remove 'or otherwise' from the objective. Exploring denotes an investigation into the success of NHS111 and therefore the likelihood results of the venture would be embedded within the exploration of the evidence. The background section of the article gives the impression that the primary data presented were collected post the official launch of the NHS11 service in 2014.

It would be more meaningful if authors had some preconceived criteria for measuring success of an urgent care service, using homogenous data. Authors tried to write the article within a mixed methods framework using two different types of data that are not comparable. Comparing data from a qualitative case study across five sites involving a time lapse with more recent national quantitative data confounds the methodology. There have also been a number changes aimed to streamline urgent care since 2013, which could have significantly impacted on the secondary data obtained from the minimum dataset (MDS).

The article would benefit from a discussion section to articulate authors' interpretation of the findings alongside the current evidence. The current format does not clearly convey this.

The NHS111 is not a new service since it has been operational for a while and the effects of trained non-clinical call handlers have been explored.

- Turner, J., O'Cathain, A., Knowles, E., & Nicholl, J. (2013). Impact of the urgent care telephone service NHS 111 pilot sites: a controlled before and after study. BMJ open, 3(11), e003451).
- Turnbull, J., Prichard, J., Halford, S., Pope, C., & Salisbury, C. (2012). Reconfiguring the emergency and urgent care workforce: mixed methods study of skills and the everyday work of non-clinical call-handlers in the NHS. Journal of health services research & policy, 17(4), 233-240.
- O'Cathain, A., Knowles, E., Turner, J., & Nicholl, J. (2014). Acceptability of NHS 111 the telephone service for urgent health care: cross sectional postal survey of users' views. Family practice, 31(2), 193-200.

REVIEWER	Hamde Nazar
	Durham University, UK
REVIEW RETURNED	20-Jan-2017

GENERAL COMMENTS	I would like to thank the authors and the journal for the opportunity to review this manuscript. The work is well-written and presented and provides a good overview of how NHS 111 has progressed at the selected sites. The study is ambitious in it's aims and does achieve them to some extent. The amount of work described in the methods, e.g. six focus groups with 47 stakeholders, does not seem to be fully reported within this paper. I feel there could have been a lot that has been omitted, considering the relatively small amount that is included within the discussion. This does make you feel that the study has under-reported and potentially not done the qualitative data justice. So is a further paper required to present some more of the work, if so then reference to this would be appropriate. The question about whether NHS 111 has been successful, fails to acknowledge that one of the aims of the service was to help patients receive the 'right advice in the right place, first time'. If the MDS data was reviewed against this criteria I think findings would demonstrate that this is yet another performance indicator where the service often falls short. This in itself could be included within the discussion around cost-effectiveness. The quality of the reporting is high and the study has relevance in the current NHS climate, I therefore have no qualms in recommending for publication.

VERSION 1 – AUTHOR RESPONSE

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Reviewer Name: Janette Turner

Institution and Country: ScHARR, University of Sheffield, UK

1. In the introduction it is stated that NHS 111 has provided telephone triage since 2014. It is true that it was at this point NHS Direct was "turned off" and 111 became the single telephone service but NHS 111 services had been in existence for some time before that (the authors own work was conducted in 2011-13 evidencing services before 2014). This is minor but a non specialist or international reader might interprete this as it only became available in 2014 and the rest of the paper presenting data from 2011 could than be confusing. it just needs some clarification at the beginning of the introduction around what the 2014 date signifies.

Page 4 revised and now reads:

NHS 111 provides telephone triage for urgent care in England. The service is free to use and is available 24 hours a day, 365 days a year across England. It is positioned at the heart of the policy vision for integrated care set out in the Five Year Forward View (2014) and the more recent GP Forward View (2016). (1, 2)

• • •

NHS 111 was officially launched in February 2014 following piloting in four sites in England in 2010,

(evaluated by researchers at the University of Sheffield. (8, 9)) and the establishment of further 'first wave' services in the intervening years. Its predecessor, NHS Direct, previously available on an 0845 telephone number, was discontinued in March 2014, and there extant plans to extend NHS 111 to Wales. 2. In table 1 although described in footnotes it Column heads have been revised on page 7 to would be helpful to the reader if the section headings said whether numbers or proportion are being presented (took me a while to work it out0 so, for example to add (%) to the end of Percentage of transfers to clinical advisors and the heading in the table "Transfers to clinical use of call back advisors and use of callback" 3. On page 8 line 37 onwards there is a quote We have revised text on p4-5 so that this quote will about dispatching cars for home visits. Again, for a non expert or international reader this be clearer might be confusing as the description of NHS 111 in the introduction is focussed on the The call handlers use the Pathways CDSS to telephone triage element and someone could assess accounts of symptoms, prioritise care be forgiven for thinking this is all that happens needs and direct callers to services or self-care. and the care dispatching then doesn't make Calls conclude with a 'disposition' which can range sense. I acknowledge that with so many from sending an ambulance, arranging a home providers there are many different operating visit, booking an urgent primary models but it would be helpful in the description of 111 to put in a couple of examples of what they do in addition to triage (maybe using the home visit service as one so that it then provides context for the later description). 4. On page 12 in the section on cost Correct reference has been inserted. effectiveness the reference used (8) is wrong there is no economic data presented in this paper. The correct reference is the full report J Turner, A O'Cathain, E Knowles, J Nicholl, J Tosh, F Sampson, P Coleman, J Coster. Evaluation of NHS 111 Pilot sites. Final Report to the Department of Health. Medical Care Research Unit, University of Sheffield, 2012. http://www.shef.ac.uk/polopoly_fs/1.2274 04!/file/NHS 111 final report August 2012.pd 5. Page 13 in implications line 50 states "It had Revised text page 14 now reads: over a million and a half users in 2016" implying this many users in one year but the

data presented in table 1 shows over 1 million	
calls per month. This needs clarifying	It had over 15 million users in 2016 and an apparently upward trend in demand.
Reviewer: 2 Reviewer Name: Anne Martin Institution and Country: Canterbury Christ Church University, United Kingdom	
6. It would be useful to remove 'or otherwise' from the objective.	Revised in the abstract on page 1
7. The background section of the article gives the impression that the primary data presented were collected post the official launch of the NHS11 service in 2014.	Revised text on page 5 In this paper we draw on our detailed case study of five NHS 111 sites and subsequent secondary analysis of routine data made available by NHS England
	And in methods section we say We conducted a comparative case study of five English NHS 111 call centres between 2011-13. (12)
	Hopefully this is now clear.
8. It would be more meaningful if authors had some preconceived criteria for measuring success of an urgent care service, using homogenous data. Authors tried to write the article within a mixed methods framework using two different types of data that are not comparable. Comparing data from a qualitative case study across five sites involving a time lapse with more recent national quantitative data confounds the methodology. There have also been a number changes aimed to streamline urgent care since 2013, which could have significantly impacted on the secondary data obtained from the minimum dataset	We have explained why we conducted the secondary analysis as follows This study followed on from an earlier study investigating the deployment of NHS Pathways software in 999 and out of hours call handling sites. (13) Our continued interest in seeing how this service fared after our study completed led us to undertake a quantitative secondary analysis. To do this we obtained the NHS 111 Minimum Data Set (MDS) made publically available by NHS England (14)
(MDS).	The current configuration of urgent care services is noted in the introduction.
9. The article would benefit from a discussion section to articulate authors' interpretation of the findings alongside the current evidence.	We believe we have covered this in the section on page 13 (headed 'Discussion'). We provide a summary of the findings and then have a section

The current format does not clearly convey sub-headed implications, which contain these this. items. 10. The NHS111 is not a new service since it Relevant references (including to our own work) has been operational for a while and the effects are cited page 17 of trained non-clinical call handlers have been explored. • Turner, J., O'Cathain, A., Knowles, E., & Nicholl, J. (2013). Impact of the urgent care telephone service NHS 111 pilot sites: a controlled before and after study. BMJ open, 3(11), e003451). • Turnbull, J., Prichard, J., Halford, S., Pope, C., & Salisbury, C. (2012). Reconfiguring the emergency and urgent care workforce: mixed methods study of skills and the everyday work of non-clinical call-handlers in the NHS. Journal of health services research & policy, 17(4), 233-240. • O'Cathain, A., Knowles, E., Turner, J., & Nicholl, J. (2014). Acceptability of NHS 111 the telephone service for urgent health care: cross sectional postal survey of users' views. Family practice, 31(2), 193-200. Reviewer: 3 **Reviewer Name: Hamde Nazar** Institution and Country: Durham University, UK 11. The study is ambitious in it's aims and does This point was also noted by reviewer 1. Further achieve them to some extent. The amount of papers are in preparation exploring different aspects of the qualitative data. We agree that it is work described in the methods, e.g. six focus groups with 47 stakeholders, does not seem to difficult to do justice to such data and the analysis be fully reported within this paper. I feel there of these in a shorter paper but we have attempted could have been a lot that has been omitted, to provide sufficient evidence to support the considering the relatively small amount that is interpretations offered. included within the discussion. This does make you feel that the study has under-reported and potentially not done the qualitative data justice. So is a further paper required to present some more of the work, if so then reference to this would be appropriate. 12. The question about whether NHS 111 has Page 13 has been revised as follows: been successful, fails to acknowledge that one Although the service aspires to ensure that patients of the aims of the service was to help patients receive the 'right advice in the right place, first time' receive the 'right advice in the right place, first it seems that an increasing percentage of calls time'. If the MDS data was reviewed against require a call suggesting that callers are not getting this criteria I think findings would demonstrate

that this is yet another performance indicator	a one stop service.
where the service often falls short. This in itself	
could be included within the discussion around	
cost-effectiveness.	

VERSION 2 – REVIEW

VERSION 2 – REVIEW		
REVIEWER	Janette Turner ScHARR, University of Sheffield, UK	
REVIEW RETURNED	29-Mar-2017	
GENERAL COMMENTS	All of the previous comments have been adequately addressed and are reflected in the revised text. I have no further comments to add.	
REVIEWER	Anne Martin Canterbury Christ Church University, United Kingdom.	
REVIEW RETURNED	03-Mar-2017	
GENERAL COMMENTS	The revised manuscript is more clear about the approach used to achieving the study objectives. The reporting is more transparent,	
	including authors' interpretation of the performance of the NHS 111 urgent care service. I would recommend the paper for publication.	
REVIEWER	Hamde Nazar	
	Durham University UK	
REVIEW RETURNED	06-Mar-2017	
GENERAL COMMENTS	Many thanks for a second view of this paper. As I stated previously, this is a study of relevance in the currently overburdened NHS services. It has been carried out and articulated well. I still have my reservations about the sparse qualitative data presented but acknowledge the mixed methodology of the work that provides a multi-perspective overview of the system.	